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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,817	01/08/2004	Rhonda L. Childress	AUS920030939US1	6768
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IBM CORP (YA)			EXAMINER	
C/O YEE & ASSOCIATES PC			ANWARI, MACEEH	
P.O. BOX 802333				
DALLAS, TX 75380			ART UNIT	PAPER NUMBER
			2144	
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			10/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/753,817

Applicant(s)

CHILDRESS ET AL.

Examiner

Maceeh Anwari

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8/01/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is responsive to the amendments filed on 8/1/2007. Claims 1, 4-6, 10, 11, 14-16, 18 and 20 have been amended. No other claims have been amended, canceled, or newly presented. Accordingly, claims 1-20 are pending.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the new limitations added to claims 1 and 5, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 5-6 & 15-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. More specifically, the applicant fails to sufficiently point out or describe how the data is sent *automatically*.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant states *where the agent clears the address resolution protocol cache each time data is sent to the data processing system*. However, fails to successfully explicate how the cache will be populated when each time data is sent to the processing system, it is erased.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter Nelson; U.S. Publication No.: 2003/0005092 A1) and further in view of Datta et al. (hereinafter Datta; U.S. Patent No.: 6,295,276 B1).

Nelson teaches a method in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, the method comprising: receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system (Par. 18 & 49-50; ARP Cache, router and data).

Nelson also teaches identifying the transactions handled by each node in the set of known nodes using the cache data received from the router, to form

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identified transactions; analyzing the identified transactions (Par. 49-51; ARP Cache, discovering, unique identifier and SNMP).

Nelson does not appear to explicitly disclose in response to the analyzing the identified transactions, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes.

However, Datta discloses in response to the analyzing the identified transactions, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes (Figures 4-5 and Col. 15 lines 16-24; load balancing or load sharing algorithms).

Nelson and Datta are analogous art because they are from the same field of endeavor of computer to computer data addressing.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Nelson and Datta before him or her, to incorporate identifying the transactions handled by each node in the set of known nodes using the cache data received from the router, to form identified transactions; analyzing the identified transactions, as taught by Nelson, with selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes, as taught by Datta.

The motivation for doing so would have been to avoid overloading any individual remote network (Par. 6).

Therefore, it would have been obvious to combine Nelson with Datta to obtain the invention as specified in the instant claims.

Regarding **claim 2**, Nelson-Datta further discloses wherein the cache data is from an address resolution protocol cache located on the router (Figure 1 and Par. 18 & 49-50; routers and ARP Cache).

Regarding **claim 3**, Nelson-Datta further discloses receiving cache data from other routers on the network data processing system (Figure 1 and Par. 18 & 49-50; ARP Cache, nodes and routers).

Regarding **claim 4**, Nelson-Datta further discloses wherein the receiving step occurs on a periodic basis (Par. 52; periodic basis).

Regarding **claim 5**, Nelson-Datta further discloses wherein the cache data is automatically sent from a daemon process within the router to the data processing system without the cache data being requested by the data processing system (Par. 22 & 50; discovery server, discovery techniques).

Regarding **claim 6**, Nelson-Datta further discloses wherein the cache data from the other routers is automatically sent from a daemon process within each of the other routers to the data processing system without the cache data from the other routers being requested by the data processing system (Par. 22 & 50; discovery server).

10. Claims 7 & 17 are rejected under 35 U.S.C. 103(a) as being obvious over Nelson et al. U.S. Publication No.: 2003/0005092 A1 in view of Nelson et al. Patent No.: 5,835,720.

Nelson, in U.S. Publication No.: 2003/0005092 A1, teaches the invention as discussed above.

Nelson, in U.S. Publication No.: 2003/0005092 A1, does not appear to explicitly disclose generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the communications paths with a graphical indication of the network traffic.

However, Nelson (in Patent No.: 5,835,720) discloses generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the communications paths with a graphical indication of the network traffic (Col. 4 lines 56-63 & Col. 5 lines 12-22; GUI).

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Nelson (Pub. No.: 2003/0005092 A1) and Nelson (Pat. No.: 5,835,720) before him or her to incorporate receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system, as disclosed by Nelson (Pub. No.: 2003/0005092 A1), with generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the



communications paths with a graphical indication of the network traffic, as taught by Nelson (Pat. No.: 5,835,720).

The motivation for doing so could have been to portray the recursive process, of the "table walk" technique, more thoroughly.

The suggestion for doing so would have been where Nelson (Pub. No.: 2003/0005092 A1) mentions (Par. 50, lines 14-15) that any of the discovery techniques he discussed could be used in conjunction with other discovery techniques.

Therefore, it would have been obvious to combine Nelson (Pub. No.: 2003/0005092 A1) with Nelson (Pat. No.: 5,835,720) to obtain the invention as specified in the instant claims.

Regarding **claim 8**, Nelson-Datta further discloses wherein the cache data is received through an agent located on the router (Par. 5 & 18 & 49-50; This is also an inherent feature within routers to have some sort of memory and an agent or a daemon).

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter Nelson; U.S. Publication No.: 2003/0005092 A1) and further in view of Mohammad (U.S. Patent No.: 5,894,479).

Nelson teaches the invention as discussed above.

Nelson also teaches wherein the cache data is from an address resolution protocol cache located on the router (Figure 1 and Par. 18 & 49-50; routers and ARP Cache); and wherein the cache data is received through an agent located

on the router (Par. 5 & 18 & 49-50; This is also an inherent feature within routers to have some sort of memory and an agent or a daemon).

Nelson does not appear to explicitly disclose where the agent clears the address resolution protocol cache each time data is sent to the data processing system.

However, Mohammad discloses where the agent clears the address resolution protocol cache each time data is sent to the data processing system (Figures 3-6 and Col. 7 lines 47-56 & Col. 9 lines 9-13; deleting ARP table).

Nelson and Mohammad are analogous art because they are from the same field of endeavor of establishing and managing computer networks.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Nelson and Mohammad before him or her, to incorporate a wherein the cache data is received through an agent located on the router, as disclosed by Nelson, with where the agent clears the address resolution protocol cache each time data is sent to the data processing system, as taught by Mohammad.

The motivation for doing so would have been to keep the data from becoming aged and slowing down the system.

Therefore, it would have been obvious to combine Nelson with Mohammad to obtain the invention as specified in the instant claim.

**Claim 10** is substantially the same as **claim 1** and is thus rejected for reasons similar to those in rejecting **claim 1**.

**Claims 11-16** list all the same elements of **Claims 1-6**, but in system form rather than method form. Therefore, the supporting rationale of the rejection to **claim 1-6** applies equally as well to **claims 11-16**.

**Claims 18-20** list all the same elements of **Claims 1-3**, but in computer readable medium form rather than method form. Therefore, the supporting rationale of the rejection to **claim 1-3** applies equally as well to **claims 18-20**.

**Examiner Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant has had an opportunity to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections. See *In re Prater and Wei*, 162 USPQ 541 (CCPA 1969), and MPEP 2111.

14. Applicant employs broad language, which includes the use of word, and phrases, which have broad meanings in the art. In addition, Applicant has not argued any

narrower interpretation of the claim language, nor amended the claims significantly enough to construe a narrower meaning to the limitations. As the claims breadth allows multiple interpretations and meanings, which are broader than Applicant's disclosure, the Examiner is forced to interpret the claim limitations as broadly and as reasonably possible, in determining patentability of the disclosed invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993).

**15.** Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response, and reiterates the need for the Applicant to more clearly and distinctly defines the claimed invention.

### ***Conclusion***

**16.** Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maceeh Anwari whose telephone number is 571-272-7591. The examiner can normally be reached on Monday-Friday 7:30-5:00 PM ES.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.A.

A handwritten signature in black ink, appearing to read 'W. Vaughn', with a long horizontal flourish extending to the left.

WILLIAM VAUGHN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100